

# REQUEST FOR PROPOSAL

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.**

## RFP SPECIFIC INFORMATION

☒ BUREAU OF HIGHWAYS ☐ BUREAU OF TRANSPORTATION PLANNING \*\* ☐ OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

☒ NO ☐ YES DATED \_\_\_\_\_ THROUGH \_\_\_\_\_

<input type="checkbox"/> <b>Prequalified Services</b> – See page ____ of the attached Scope of Services for required Prequalification Classifications.	<input checked="" type="checkbox"/> <b>Non-Prequalified Services</b> - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed.
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☐ **Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

**For all Qualifications Based Selections**, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**\*\*For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "**PRICE PROPOSAL.**" The vendor's name and return address **MUST** be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

**For a cost plus fixed fee contract**, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

☐ **Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

☒ **Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

☐ **Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

## BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "**SEALED BID.**" The vendor's name and return address **MUST** be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

**PROPOSAL SUBMITTAL INFORMATION**

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER 5	PROPOSAL/BID DUE DATE 11/19/08	TIME DUE 12:00PM
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**PROPOSAL AND BID SHEET MAILING ADDRESSES**

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

☒ MDOT Project Manager ☐ MDOT Other

Michele Mueller  
18101 W Nine Mile Road  
Southfield, MI 48075

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

Lansing Regular Mail	OR	Lansing Overnight Mail
<input checked="" type="checkbox"/> Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933
<input type="checkbox"/> Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

**GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

**MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION**

- 5100D** – Request for Proposal Cover Sheet
- 5100G** – Certification of Availability of Key Personnel
- 5100I** – Conflict of Interest Statement

(These forms are not included in the proposal maximum page count.)

# Michigan Department of Transportation

## SCOPE OF SERVICE FOR DESIGN SERVICES

**CONTROL SECTION(S):** N/A

**JOB NUMBER(S):** 102226

**PROJECT LOCATION:** The project is located on I-75 at the Chrysler Headquarters campus in Auburn Hills, in Oakland County.

**PROJECT DESCRIPTION:**

Work involved in the design of the project consists of: Develop, Engineer, install, optimize and integrate testbed network for VII.

Complete a project including, but not limited to the following:

- a) Work with the Project Manager for each task to accomplish all tasks set forth in this procurement.
- b) Review the current working system design.
  - a. Objective is not to redesign the system but to insure that any modifications are addressed prior to installation. System will be rebuilt at current location utilizing current technology and hardware for point to point and point to multipoint systems.
  - b. Develop system acceptance testing procedures.
  - c. This should form the basis of the system that will be built, assembled and installed.
  - d. The current working system shall remain in place and working to the same level of service it is today while the net network(s) are being installed and if disruption is necessary during switchover the stakeholders shall agree on the time and length of outage.
- c) Conduct site evaluations.
  - a. Test existing equipment that will interface with the new equipment.
  - b. Test any existing or new equipment against other area interferences.
- d) MDOT will supply the equipment for this project that is currently installed on the network.
  - a. Only the items currently installed on the existing network will be supplied by MDOT, any other equipment necessary will have to be supplied by the integrator.
  - b. The integrator will be responsible to remove any existing equipment that is not needed upon completion of the testbed and provide that to MDOT.
  - c. All hardware installed as part of this project shall be new and all existing equipment shall be replaced and returned to MDOT or MDOT's agent.

- e) Install equipment at location designed and agreed upon with the stakeholders for the project as identified by MDOT.
  - a. Provide a site readiness evaluation to determine if the site is ready and suitable for installation for new and existing network configurations.
  - b. Any power, cable routing facilities etc. necessary for the installations shall be performed to interconnect the hardware.
  - c. Any towers etc that need to be erected will have to be done as part of the installation etc.
  - d. Any equipment for the project shall be weather hardened and applicable for the installation locations.
  - e. Any software or firmware upgrades shall be included in the project for both procurement and installation.
- f) Implementation, Ancillary Procurement and Turn Up Services
  - a. Shall include both implementation and procurement of ancillary equipment.
  - b. Shall include at a minimum transmission lines, supply and installation, antenna stand off supply and installation, antenna installation, ground cable supply and installation, CAT 5, lightning protection etc.
  - c. Shall also include ordering and inventorying ancillary hardware items, mobilize installation and construction equipment and tools to sites, Install IAP, MWR and backhaul units on buildings, light posts, and/or other infrastructure necessary, install microwave backhaul units and Fiber Media Converters as required, Install antennas, CAT 5 lines and accessories as required.
- g) System Optimization
  - a. Configure, Optimize and Program Equipment
    - i. Verify that all equipment is installed and operating properly
    - ii. Verify that all electrical and signal levels are properly set once field installation is complete.
    - iii. Verify that all communication interfaces between devices is operating properly.
    - iv. Features and functionality shall be tested in ensure they are functioning according to design specifications and final configuration.
  - b. Remove/Dispose of Debris
    - i. The integrator shall remove and dispose of any and all debris that is a result of delivery, installation or site improvements.
- h) System Maintenance
  - a. Monitoring and Notification
    - i. Insure the system has the ability to be monitored for when the network is up/down at all times.
    - ii. Provide method of notification to MDOT and Chrysler when the network is up/down with an estimated time of repair.
    - iii. System shall not be down for any period longer than 24 hours.
    - iv. Provide system reliability information which shall not be less than .999.
    - v. Provide own services for accessing, servicing etc the network upon completion.

- vi. System shall be services, repaired etc in full for 3years from the date of contract issuance.
- i) Provide functional acceptance testing
  - a. Insure that acceptance test procedures are in place
  - b. Perform functional Acceptance Testing based upon test documents; MDOT shall witness the acceptance testing.
  - c. The integrator shall be responsible for the resolution of any documented deficiencies.
  - d. Any deficiencies detected during the final phase will be put on a deficiency list and shall be resolved prior to final system acceptance.
- j) Provide as built drawings for all of the installations.
- k) Project Finalization
  - a. Provide equipment manuals
  - b. Provide warranty documentation

**ANTICIPATED SERVICE START DATE:** January 15, 2009

**ANTICIPATED SERVICE COMPLETION DATE:** July 15, 2012

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**

N/A

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

N/A

**DBE REQUIREMENT:** N/A

**MDOT PROJECT ENGINEER MANAGER:**

Michele R. Mueller (Transportation Engineer)  
Metro Region  
18101 W Nine Mile Road, Southfield, MI 48075  
(248) 483-5133  
(248) 569-3103  
muellerm2@michigan.gov

**PURPOSE**

The purpose is to Develop, Engineer, install, optimize, maintain and integrate a system to: provide mobile broadband data connectivity between equipped vehicles and the internet for development and exploration of application use cases. This project will be located on I-75 at the Chrysler Headquarters campus in Auburn Hills, in Oakland County.

## **BACKGROUND**

MDOT is continuing a joint partnership with Chrysler to provide a communications network on the Chrysler campus in Auburn Hills that will pull vehicle data from their fleet of approximately 3,000 equipped vehicles. The network is currently utilizing WiFi to supply data to the Michigan Department of Transportation for use in transportation applications and to Chrysler for their internal uses. MDOT is currently evaluating at solutions to increasing safety and congestion issues throughout Michigan. In order to address both the infrastructure and vehicle side MDOT is currently one of the leaders in the development of Vehicular Infrastructure Integration (VII). VII is determined to increase safety from a vehicular and infrastructure standpoint. MDOT in various locations is working to collect infrastructure data to provide better management of the Departments assets.

## **PROJECT DESCRIPTION**

This project includes conceptual, design, installation, acceptance testing of the wireless broadband network infrastructure and backhaul communication network, maintenance of the system for a period of three years, for the designated test bed described above. Review operational requirements and the impact of those requirements on various equipment configurations; identify special product requirements and their impact on system implementation, and the system implementation plan. Install all equipment at locations designated by MDOT. Conduct acceptance testing to evaluate performance of wireless broadband network. The maintenance of the system shall involve monitoring the network(s), providing any on site maintenance necessary, limiting MAC address ranges, and, if the equipment is upgraded the installation and integration of that new equipment would be included as well.

The system shall provide high bandwidth connectivity during vehicle operation with hand-offs up to expressway speeds. The system shall enable wireless access to the internet via vehicles and create an environment for other communication application development.

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, and other emerging standards, concepts etc.).

## **PROJECT SCHEDULE**

All hardware shall be installed no later than April 15, 2009. Acceptance testing is anticipated to take between 1-3 months. The clock for maintenance and operations shall not begin until final acceptance of the operating system.

## **MONTHLY PROGRESS REPORT**

Consultant(s) shall provide copies of all project reports; correspondence, meeting announcements, and meeting minutes which shall be delivered by email to the MDOT Managers. All documentation and reports shall be delivered in the current version of Microsoft Word being used by the Department. All documentation delivered shall be clear, concise complete, in appropriate English, and in compliance with standards required by the MDOT Project and Task

Managers. If corrections are needed to the completed work due to errors made by the Consultant(s), the Consultant(s) shall correct at no cost to MDOT.

Consultant(s) shall provide the minutes of all planning, work group and focus group sessions, and other meetings attended. These shall be distributed by email to the MDOT Project and Task Managers.

- a) A brief description of the activities conducted during the reporting period including all milestones attained and/or significant events.
- b) A brief summary of work conducted on each task during the previous month, the work anticipated for the upcoming month, problems encountered and required MDOT actions.
- c) A discussion of any problems encountered or anticipated(e.g. review and update work plans, scope changes, changes in project limits, funding requirements, technological constraints, institutional issues, schedule delays) together with recommended solution to such problems.

### **CONSULTANT RESPONSIBILITIES**

**A. Develop and Maintain Schedule**

Consultant(s) shall provide information on their internal method for scheduling and controlling projects to the Project and Task Manager. Consultant(s) shall deliver and be responsible for the following items for each specified region:

**B. Manage Subconsultants**

Consultant will coordinate, manage, and monitor the performance of subconsultants. The subconsultant coordination meetings will be conducted on an as needed basis.

**C. Prepare Progress Reports and Invoices**

The Consultant Team will prepare monthly progress reports in a format that will include a summary of the work conducted on each task during the previous month, the work anticipated for the upcoming month, problems encountered and required MDOT actions.

**D. Conduct Quality Assurance/Quality Control (QA/QC) Activities**

This task includes conducting QA/QC of all interim and major deliverables. Documents will be checked for understandability, readability, and accuracy. All plan comments and revisions will be documented and tracked.

**E. Maintain Project Records and Files**

The Team will maintain and organize project records, correspondence, files and deliverables for access by MDOT.

### **MDOT RESPONSIBILITIES**

MDOT shall:

- A. Provide notice to proceed.
- B. Provide primary point of Contact.

- C. Complete project scheduled tasks.
- D. Grant and assist with site access
- E. Assign a Task Manager from each region to oversee the project.
- F. Provide documentation of existing equipment.
- G. Provide dates possible for cutover
- H. Communicate project changes
- I. Coordinate access and schedules with the Consultant to complete the deliverables described.

#### **CONSULTANT PAYMENT – Unit Price:**

Compensation for this project shall be on a **unit price** basis. This basis of payment typically includes a maximum quantity of units and a maximum reimbursable cost per unit.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

#### **SCORING:**

Candidates submitting proposals will be evaluated using established selection method. Scores are assigned to each candidate based on five categories each worth an amount of points. Scores from each of the categories are summed together to generate an overall point total. Following is a description of criteria and point assignment used to score proposals.

- A. **Understanding of Services – 20 points:** Statement of understanding of project requirements and a technical explanation of procedures and work plans use to perform work. A brief description of equipment to be used to complete work.
- B. **Qualifications and team experience – 30 points:** List qualifications and experience of key staff assigned to each component of work.
- C. **Past performance and experience with similar projects – 35 points:** Provide a list and description of similar project you have provided services for in the past five years. Provide references, including name, title, address and phone number of a project leader.
- D. **Maintenance plan – 20 points:** Provide a maintenance plan for the network including but not limited to response time, equipment available, replacement parts and notification.
- E. **Price – 25 points:** Provide a list of unit prices using the attached form.
- C. **Location – 5 points:** Include the location of the office(s) from which work will be performed.



## PRICE SHEET

Chrysler Testbed

### PAY ITEMS

ITEMS OF WORK	ESTIMATED DAYS FOR COMPLETION	ESTIMATED QUANTITY	UNIT PRICE	TASK TOTAL
System Installation				
System Testing				
System Maintenance – Year 1				
System Maintenance – Year 2				
System Maintenance – Year 3				

**Total Price:** \_\_\_\_\_

<b>Consultant Name</b>	
<b>Consultant Address</b>	
<b>Date</b>	

Price is one of several selection criteria considered to determine overall score, following Best Value Selection practice.